

PATENT ABSTRACTS OF JAPAN

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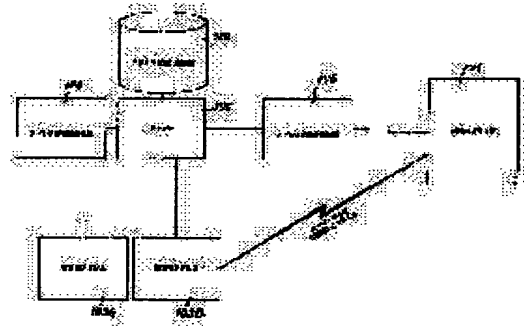
(71)Applicant : OMRON CORP

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(72)Inventor : MAEKAWA KOICHI
NAKAJIMA HIROSHI
HORIUCHI MASAYUKI
KOJIYA KAZUTO**(54) METHOD AND DEVICE FOR PROCESSING ACCESS REQUEST IN SERVER MACHINE, METHOD AND DEVICE FOR MANAGING ADDRESS BOOK IN CLIENT MACHINE****(57)Abstract:**

PROBLEM TO BE SOLVED: To continuously access pages and to eliminate the need of communication to a user whose address is changed by accessing user individual areas based on the converted addresses obtained by conversion and transmitting the storage information to a client machine.

SOLUTION: When an access request arrives from the side of the client machine, an automatic address conversion device 105 receives the access request and takes out the address includes in the request. Then, the automatic address conversion device 105 judges whether the address is changed or not. When the address is changed, an address conversion table registered in an address change storage device 102 is referred to with the address as a key. Then, the storage information is read from the home page area of the changed address which is obtained as a result. Then, information is transmitted to the client machine after the new changed address is added to storage information which is read.

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CLAIMS

[Claim(s)]

[Claim 1] It is equipment for processing the access request from a client machine in the Sir par machine with which two or more establishment of the user individual fields, such as a homepage of the Internet, was carried out. Among said two or more user individual fields An address translation table storage means to memorize the address translation table which associated the address before modification, and the address after modification mutually about the user individual field where address modification was performed, When the address concerning the access request which came from the client machine has modification By referring to said address translation tape ** by using the address concerning the access request concerned as a key An address translation means to change into the address after changing the address before modification, The access request processor in the server machine characterized by providing a new address storage information-sending means to perform access to the user individual field which corresponds based on the address after modification obtained by said conversion, and to send out the storage information to a client machine.

[Claim 2] Said new address storage information-sending means is an access request processor in the server machine according to claim 1 characterized by sending out the information on a purport that address modification is performed about the user individual field concerned to a client machine in addition to sending out of said new address storage information.

[Claim 3] The access request processor in the server machine according to claim 2 characterized by including the address after modification in the information on a purport that address modification is performed about said user individual field concerned, at least.

[Claim 4] In order that user individual fields, such as a homepage of the Internet and a mail box of an electronic mail, may emit an access request from a client machine to the Sir par machine by which two or more establishment was carried out It is equipment for managing the address book held at the client machine concerned. An access request sending-out means to read the address of the desired destination from said address book, and to send out the access request to the user individual field concerned, A server information receiving means to receive the server information which answers sending out of said access request and comes from a server machine, An address-modification judging means to judge the existence of the information on a purport that address modification is carried out to said received server information about the user individual field concerned, When judged with there being information on a purport that said address modification is performed Address book management equipment in the client machine characterized by providing an address book modification means to change the applicable address of said address book with the address after modification included in the information concerned.

[Claim 5] It is an approach for processing the access request from a client machine in the Sir par machine with which two or more establishment of the user individual fields, such as a homepage of the Internet, was carried out. Among said two or more user individual fields The 1st step which memorizes the address translation table which associated the address before modification, and the address after modification mutually about the user individual field where address modification was performed, When the address concerning the access request which came from the client machine has modification By referring to said address translation tape ** by using the address concerning the access request concerned as a key The 2nd step changed into the address after changing the address before modification, The access request art in the server machine characterized by providing the 3rd step which performs access to the user individual field which corresponds based on the address after modification obtained by said conversion, and sends out the storage information to a client machine.

[Claim 6] Said 3rd step is an access request art in the server machine according to claim 5 characterized by sending out the information on a purport that address modification is performed about the user individual field concerned to a client machine in addition to sending out of said new address storage information.

[Claim 7] The access request art in the server machine according to claim 6 characterized by including the address after modification in the information on a purport that address modification is performed about said user individual field concerned, at least.

[Claim 8] In order that user individual fields, such as a homepage of the Internet and a mail box of an electronic mail, may emit an access request from a client machine to the Sir par machine by which two or more establishment was carried out The step which is an approach for managing the address book held at the client machine concerned, reads the address of the desired destination from said address book, and sends out the access request to the user individual field concerned, The step which receives the server information which answers sending out of said access request and comes from a server machine, The step which judges the existence of the information on a purport that

address modification is carried out to said received server information about the user individual field concerned, The address book management method in the client machine characterized by providing the step which changes the applicable address of said address book with the address after modification included in the information concerned when judged with there being information on a purport that said address modification is performed.

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Field of the Invention] This invention relates to the address book management method and equipment in a client machine at the access request art in the server machine for avoiding that inconvenience arises to the user who is going to access those information and equipment, and a list, when address modification is in the homepage of the Internet, or the mail box of an electronic mail.

[0002]

[Description of the Prior Art] The homepage by various kinds of organizations and individuals is established by the server machine placed on WWW of the Internet, and when many people always access various homepages using a browser, various kinds of information has come to hand to it these days. The address of this kind of homepage may be obliged to modification for the sake of a provider's [an establishment person's convenience, or] convenience etc.

[0003]

[Problem(s) to be Solved by the Invention] However, when DS and the address are changed easily, it becomes impossible accessing the user of a large number which had accessed the homepage conventionally, and he will receive a great trouble from many people coming to access, if it is in a popular homepage once it exhibits a homepage. In addition, even if it was in the implementer side of a homepage, the address and its contents information after modification will need to be released, and there was a trouble referred to as becoming complicated.

[0004] Even if the user who had accessed the homepage to which this invention is made paying attention to such a conventional trouble, and the place made into that purpose is applicable from before address modification is after modification arises to the address, he can access that page continuously, and on the other hand, by the page manager side, even if address modification arises, he is to make it unnecessary to connect that to a user.

[0005]

[Means for Solving the Problem] Invention of this application according to claim 1 is equipment for processing the access request from a client machine in the server machine with which two or more establishment of the user individual fields, such as a homepage of the Internet and a mail box of an electronic mail, was carried out. Among said two or more user individual fields An address translation table storage means to memorize the address translation table which associated the address before modification, and the address after modification mutually about the user individual field where address modification was performed, When the address concerning the access request which came from the client machine has modification By referring to said address translation tape ** by using the address concerning the access request concerned as a key An address translation means to change into the address after changing the address before modification, Access to the user individual field which corresponds based on the address after modification obtained by said conversion is performed, and it is in the access request processor in the server machine characterized by providing a new address storage information-sending means to send out the storage information to a client machine.

[0006] And since address modification from the old address to the new address is performed automatically according to this invention according to claim 1, even if the user who had accessed the homepage which is applicable from before address modification is after modification arises to the address, he can access that page by the approach as usual, and even if address modification arises, on the other hand, he does not need to connect that to a user by the page manager side.

[0007] Invention of this application according to claim 2 has said new address information sending-out means in the access request processor in the server machine according to claim 1 characterized by sending out the information on a purport that address modification is performed about the user individual field concerned to a client machine in addition to sending out of said new address information.

[0008] And according to this invention according to claim 2, although the target homepage etc. can be accessed by the approach as usual, it can be based on actuation of an address automatic conversion function, and it can tell to a user that the actual address is already changed.

[0009] The access request processor in the server machine according to claim 2 characterized by including the address after modification in the information on a purport that address modification is performed about said user individual field concerned, at least has invention of this application according to claim 3.

[0010] And according to this invention according to claim 3, actual addresses, such as a homepage accessed by

actuation of an address automatic conversion function, can be told to a user.

[0011] In order that user individual fields, such as a homepage of the Internet and a mail box of an electronic mail, may emit an access request from a client machine to the Sir par machine by which two or more establishment was carried out, invention of this application according to claim 4 It is equipment for managing the address book held at the client machine concerned. An access request sending-out means to read the address of the desired destination from said address book, and to send out the access request to the user individual field concerned, A server information receiving means to receive the server information which answers sending out of said access request and comes from a server machine, An address-modification judging means to judge the existence of the information on a purport that address modification is carried out to said received server information about the user individual field concerned, When judged with there being information on a purport that said address modification is performed It is in the address book management equipment in the client machine characterized by providing an address book modification means to change the applicable address of said address book with the address after modification included in the information concerned.

[0012] And when there is address modification in the homepage which it was going to access according to this invention according to claim 4, the address book by the side of a client machine can be automatically corrected by returning the information on to that effect.

[0013] Invention of this application according to claim 5 is an approach for processing the access request from a client machine in the Sir par machine with which two or more establishment of the user individual fields, such as a homepage of the Internet and a mail box of an electronic mail, was carried out. Among said two or more user individual fields The 1st step which memorizes the address translation table which associated the address before modification, and the address after modification mutually about the user individual field where address modification was performed, When the address concerning the access request which came from the client machine has modification By referring to said address translation tape ** by using the address concerning the access request concerned as a key The 2nd step changed into the address after changing the address before modification, Access to the user individual field which corresponds based on the address after modification obtained by said conversion is performed, and it is in the access request art in the server machine characterized by providing the 3rd step which sends out the storage information to a client machine.

[0014] Invention of this application according to claim 6 has said 3rd step in the access request art in the server machine according to claim 5 characterized by sending out the information on a purport that address modification is performed about the user individual field concerned to a client machine in addition to sending out of said new address information.

[0015] The access request art in the server machine according to claim 6 characterized by including the address after modification in the information on a purport that address modification is performed about said user individual field concerned, at least has invention of this application according to claim 7.

[0016] In order that user individual fields, such as a homepage of the Internet and a mail box of an electronic mail, may emit an access request from a client machine to the Sir par machine by which two or more establishment was carried out, invention of this application according to claim 8 The step which is an approach for managing the address book held at the client machine concerned, reads the address of the desired destination from said address book, and sends out the access request to the user individual field concerned, The step which receives the server information which answers sending out of said access request and comes from a server machine, The step which judges the existence of the information on a purport that address modification is carried out to said received server information about the user individual field concerned, When judged with there being information on a purport that said address modification is performed, it is in the address book management method in the client machine characterized by providing the step which changes the applicable address of said address book with the address after modification included in the information concerned.

[0017] In addition, in each above-mentioned claim, there is semantics not only including a homepage but a user individual field like a mail box field or a BBS field in an electronic mail with "user individual fields, such as a homepage of the Internet."

[0018]

[Embodiment of the Invention] Hereafter, with reference to an accompanying drawing, it explains to a detail about the gestalt of desirable implementation of this invention.

[0019] The block diagram showing roughly the configuration of the whole client/server system on the Internet to which 1 operation gestalt of this invention is applied is shown in drawing 1 . In this drawing, what is shown with a sign 100 is one of the server machines of a large number arranged on the Internet, and the user individual field of a large number equivalent to a homepage is established on this server machine 100. And the proper address (homepage address) is given to ***** to those user individual fields so that it may explain to a detail later.

[0020] On the other hand, in drawing, in order that what is shown with a sign 101 may access the homepage on the Internet, it is the WWW browser with which the client machine side was equipped, and "Netscape", "Mosaic", etc. are well known as this WWW browser 101.

[0021] By the way, although the user who is going to access the homepage on the Internet sends out on the Internet the address of the homepage which corresponds using above-mentioned WWW browser 101, if the address of such a homepage is changed in the corresponding server machine in that case, a user cannot obtain information on the homepage made into the purpose.

[0022] So, in this invention, though a change of such the homepage address was made, the following devices are

performed so that it can access that there is no trouble in the homepage which corresponds using the address before modification in any way.

[0023] That is, the address-modification store 102 functions as an address translation table storage means to memorize the address translation table which associated mutually the address of the homepage field before modification, and the address of the homepage field after modification about the homepage field where address modification was performed among two or more homepage fields (user individual field) established on the server machine 100.

[0024] In addition, in drawing, it is the homepage field corresponding to the homepage address before modification which is shown in sign 103A, and it is the homepage field corresponding to the homepage address after modification which is shown in sign 103B.

[0025] Moreover, in this example, as shown in drawing 2 (a) - (c), the address of the homepage field after "http://www.omron.co.jp/home / maekawa/test.html", and modification is set [the address of the server machine 100] to "http://www.omron.co.jp/home / maekawa/sample/test.html" for the address of the homepage field before "http://www.omron.co.jp" and modification.

[0026] Furthermore, an example of the address translation table memorized by the address-modification store 102 is shown in drawing 6 . The address ("http://www.omron.co.jp/home / maekawa/test.html") of the homepage field before modification and the address ("http://www.omron.co.jp/home / maekawa/sample/test.html") of the homepage field after modification relate mutually, and are memorized by this address translation table so that clearly from drawing.

[0027] Next, address-modification registration equipment 104 is equipment for associating mutually the address of the homepage field before modification, and the address of the homepage field after modification, and registering with an address translation table, when the address of one of homepage fields has modification, and the actuation in the case of the register operation is shown in the flow chart of drawing 3 so that it may explain to a detail later.

[0028] next, when the address concerning the access request which came from the client machine has modification, the address automatic inverter 105 By referring to said address translation tape ** by using the address concerning the access request concerned as a key An address translation means to change into the address after changing the address before modification, Access to the user individual field which corresponds to a list based on the address after modification obtained by said conversion is performed. It functions as a new address storage information-sending means to send out the storage information to a client machine, and the actuation at the time of new address storage information sending is shown in the flow chart of drawing 4 at the list of operation at the time of the address automatic conversion so that it may explain to a detail later. in addition, the function of this address automatic inverter 105 — a server machine side — also carrying — good — it may carry out or you may carry in a client machine side.

[0029] On the other hand, a new function is prepared in WWW browser 101 with which the client machine was equipped in relation to this invention, the actuation about the important section is shown in the flow chart of drawing 5 , and the near example of a screen display of a client machine is further shown in drawing 7 .

[0030] Next, actuation of each functional element by the side of a client machine is explained to the server machine side list described above at a detail, referring to the flow chart of drawing 3 - drawing 5 .

[0031] When address modification is in either of the homepage fields established by the server machine, as shown in drawing 3 The address-modification registration demand from a user first performed by predetermined after operation with address-modification registration equipment 104 is received (step 301). The address before a user changing "http://www.omron.co.jp/home / maekawa/test.html" The address ("http://www.omron.co.jp/home / maekawa/sample/test.html") after changing into a list Wait to input (step 302,303), and as these are shown in the sign 601,602 of drawing 6 , using a key and the address after modification as a value (value) for the inputted address before modification The address-modification table in the address-modification store 102 is made to memorize (step 304).

[0032] Next, if an access request comes from a client machine side, as shown in drawing 4 , the address automatic inverter 105 will take out the address included in the demand concerned, after receiving the access request (step 401) (step 402). Subsequently, in the address automatic inverter 105, it judges whether the address is changed (step 403). This judgment can try access to a homepage with the address concerned, and can perform by judging whether there is any normal response to it, for example. Here, if judged with the address concerned not being changed (step 403 NO), that storage information will be continuously read from the homepage field of the address ("http://www.omron.co.jp/home / maekawa/test.html") concerned, and this read storage information will be sent out to a client machine (step 404).

[0033] When the address concerned is changed, on the other hand, the (step 403YES), The address translation table (drawing 6) registered into the address-modification store 102 by using the address ("http://www.omron.co.jp/home / maekawa/test.html") as a key is referred to (step 405). The storage information is read from the homepage field of the address after modification obtained as a result of the reference ("http://www.omron.co.jp/home / maekawa/sample/test.html") (step 406). Further After the new address after modification ("http://www.omron.co.jp/home / maekawa/sample/test.html") was added to the read storage information (step 407). In this way, the homepage information and new address information which were obtained will be sent out to a client machine (step 408).

[0034] Next, actuation of WWW browser 101 with which the client machine was equipped is explained to a detail, referring to the flow chart of drawing 5 . In a WWW browser 101 side, after sending out an access request to the

server machine of an object page through the address automatic inverter 105 (step 501), the reception standby of the information from a server machine being returned through the address automatic inverter 105 is carried out (step 502). As a result of receiving the information returned from the server machine in this condition, when being judged with there being no modification in the address, the information on a homepage field that it was returned from the server machine is displayed on the screen of a client machine by the approach as usual (step 503).

[0035] on the other hand, as a result of receiving the information returned from the server machine, when being judged with there being no modification in the address The purport which has modification in the address of the corresponding homepage field as shown in drawing 7 . In a list The address after modification added to the return information ("http://www.omron.co.jp/home/maekawa/sample/test.html") with the address before modification ("http://www.omron.co.jp/home / maekawa/test.html") it is alike and displays on the screen upper part — making (step 504) .

[0036] Moreover, it rewrites to the address ("http://www.omron.co.jp/home / maekawa/sample/test.html") after modification by which the destination address ("http://www.omron.co.jp/home / maekawa/test.html") was returned to the WWW browser with which the client machine side was equipped from the server machine when 101 had memorized the destination address in the address book (step 505).

[0037] then, the storage information on a homepage field that it was returned from the server machine as shown in drawing 7 — a screen — it is made to display on a whole bottom field mostly (step 506)

[0038] Therefore, although a user checks the contents of the accessed page according to the screen display of drawing 7 Since the address book with which the WWW browser 101 grade was equipped is also corrected automatically in addition to the ability to know immediately that the address had modification, Even if it is after modification arises in a page address, while being able to access the target homepage by the approach as usual Even if it is after such automatic conversion service is completed, based on the address book after modification, access to the target homepage is continuable without trouble.

[0039] In addition, although this invention was applied to the address of the homepage field of the Internet with the gestalt of the above operation, of course, it is applicable also to the address of the mail box of an electronic mail, or the address of an electronic blackboard.

[0040] Moreover, probably, the initiation stage of the above address automatic conversion service will be good when the time of address modification being registered and an address-modification operator perform a demand to that effect to a server then. Moreover, what is necessary will be just to consider a termination stage as the time of access frequency changing to below a constant rate, or the time of an address-modification person demanding service termination from a server machine similarly the time of fixed time amount having passed since service initiation.

[0041]

[Effect of the Invention] Even if the user who had accessed the homepage which is applicable from before address modification according to this invention so that clearly from the above explanation is after modification arises to the address, while he can access by the approach as usual to the page, even if address modification arises, he has the advantage from which it becomes unnecessary to connect that to a user by the page manager side.

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DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] It is the block diagram showing roughly the configuration of the whole client/server system to which 1 operation gestalt of this invention is applied.

[Drawing 2] It is the explanatory view showing the page address after modification in the server address in 1 operation gestalt of this invention, the page address before modification, and a list, respectively.

[Drawing 3] It is a flow chart for explaining the address-modification registration processing in 1 operation gestalt of this invention.

[Drawing 4] It is a flow chart for explaining new address storage information-sending processing to address automatic transform processing in 1 operation gestalt of this invention, and a list.

[Drawing 5] It is a flow chart for explaining address book quality processing to the access request issue processing in 1 operation gestalt of this invention, and a list.

[Drawing 6] It is the explanatory view showing the address translation table in 1 operation gestalt of this invention.

[Drawing 7] It is the screen explanatory view displayed on the client machine in 1 operation gestalt of this invention.

[Description of Notations]

100 Server Machine

101 WWW Browser

102 Address-Modification Storage

103A The homepage field of the address before modification

103B The homepage field of the address after modification

104 Address-Modification Registration Equipment

[Translation done.]

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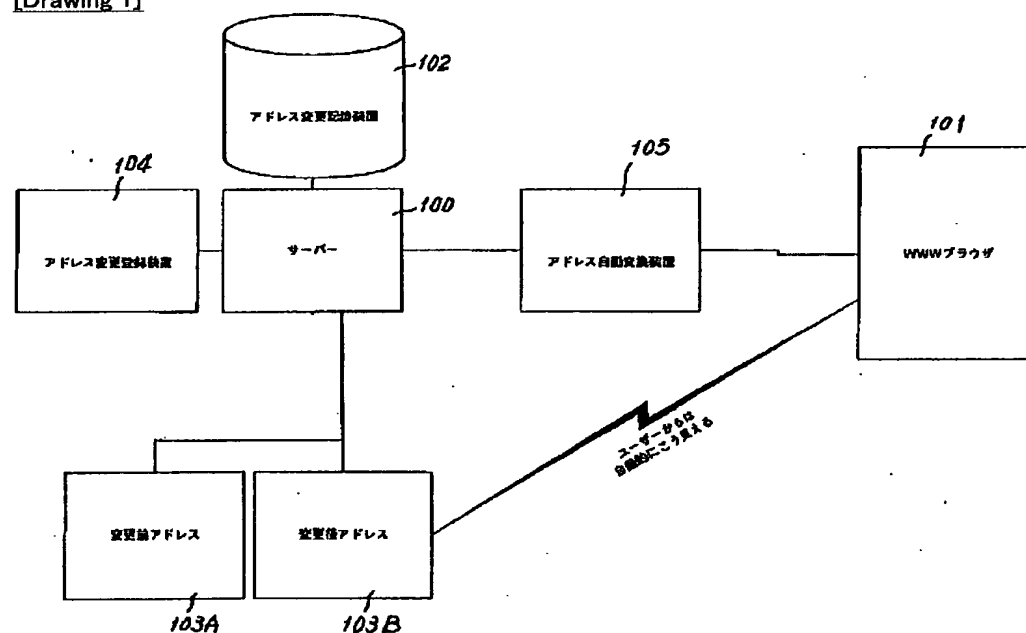
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DRAWINGS

[Drawing 6]

変更前アドレス 601	変更後アドレス 602
キー	バリュー
http://www.oncom.co.jp/home/maskawa/home.html	http://www.oncom.co.jp/home/maskawa/home-j.html
http://www.oncom.co.jp/home/maskawa/test.html	http://www.oncom.co.jp/home/maskawa/sample/test.html
http://www.oncom.co.jp/home/maskawa/pat999.html	http://www.oncom.co.jp/patent/96/pat9601.html

[Drawing 1]



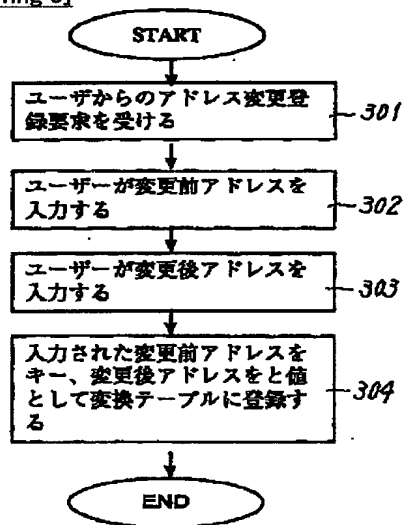
[Drawing 2]

サーバ
<http://www.omron.co.jp>
(a)

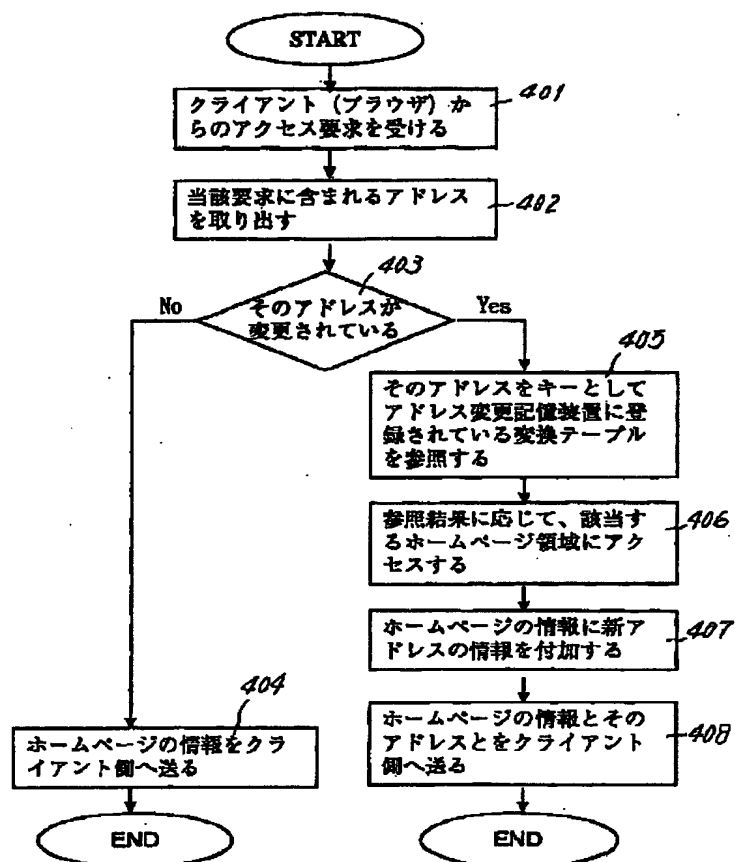
変更前アドレス
<http://www.omron.co.jp/home/maekawa/test.html>
(b)

変更後アドレス
<http://www.omron.co.jp/home/maekawa/sample/test.html>
(c)

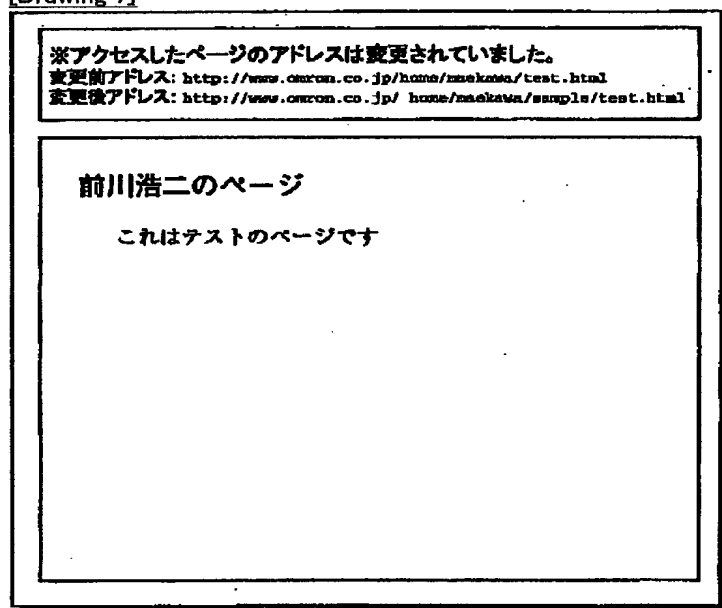
[Drawing 3]



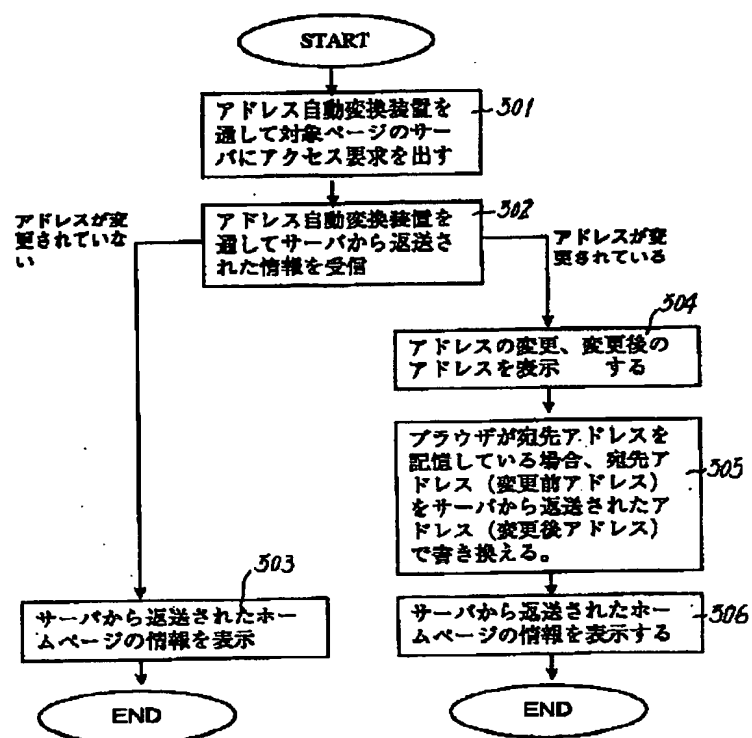
[Drawing 4]



[Drawing 7]



[Drawing 5]



[Translation done.]